

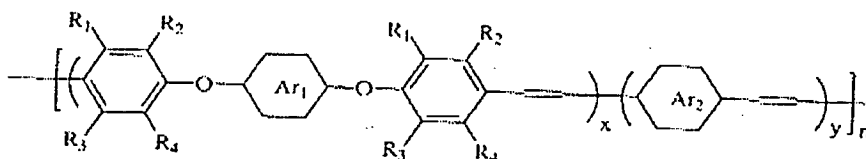
Application No.: 10/777,896

Docket No.: C3540.0001

CLAIM AMENDMENTS

Claims 1 to 6 (Canceled).

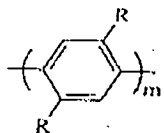
7. (New) An energy-transfer type light-emitting polymer based on poly(p-phenylene vinyl)s, which has the structural unit as represented by the following formula (1):



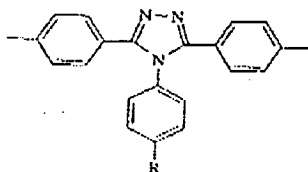
Formula (1)

wherein R_1 , R_2 , R_3 , and R_4 each independently is hydrogen, alkyl, alkoxy, optionally substituted phenyl or naphthyl; x and y each is the content of the luminous element, satisfying $0 < x < 1$, $0 < y < 1$, $x + y = 1$; and $n = 1-200$;

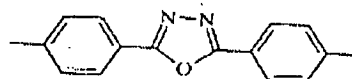
Ar_1 being one or two luminous structural elements selected from a group consisting of formula (2), formula (12), and formula (13), wherein R is hydrogen, alkyl, alkoxy, optionally substituted phenyl or naphthyl; $m = 1-10$;



Formula (2)

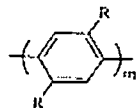


Formula (12)

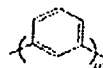


Formula (13)

Ar_2 being one or two luminous structural elements selected from a group consisting of formula (30) and formula (33), wherein R each independently is hydrogen, alkyl, alkoxy, optionally substituted phenyl or naphthyl; $m = 1-10$;



Formula (30)

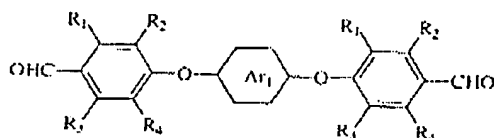


Formula (33)

Application No.: 10/777,896

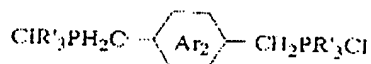
Docket No.: C3540.0001

8. (New) A process for preparing the energy-transfer type poly(p-phenylene vinyl) polymeric luminescent material according to claim 1, comprising the step of copolymerizing at least one Ar₁-containing aromatic dialdehyde monomer represented by general formula (7) and at least one Ar₂-containing aromatic diphosphonium monomer represented by general formula (8) at an equal molar amount,



Formula (45)

wherein R₁, R₂, R₃ and R₄ each independently is hydrogen, alkyl, alkoxy, optionally substituted phenyl or naphthyl; Ar₁ is defined as in above formula (1);



Formula (46)

wherein Ar₂ is defined as in above formula (1); R' is butyl or phenyl.